

Claims

- [c1] A method for managing clinical study (CS) information for a clinical research entity using a server system coupled to a centralized database and at least one client system, the centralized database having a plurality of templates stored therein, said method comprising:
- receiving at the server system CS information relating to at least one patient involved in a clinical study, the CS information is entered through a user selected template displayed on the client system;
 - storing CS information received at the server system in the centralized database;
 - tracking CS information stored in the centralized database;
 - updating the centralized database periodically with newly received CS information to maintain CS information; and
 - providing CS information in response to an inquiry.
- [c2] A method in accordance with Claim 1 further comprising transmitting from the server system to the at least one client system at least one report summarizing CS information and findings for a clinical study.
- [c3] A method in accordance with Claim 1 further comprising transmitting from the server system to the at least one client system at least one report summarizing CS information and findings for at least one patient involved in a clinical study.
- [c4] A method in accordance with Claim 1 further comprising providing at least one medical device in communication with the at least one client system, the at least one medical device includes at least one of a computed tomography device, a radiography device, a positron emission tomography device, and an ultrasound imaging device.
- [c5] A method in accordance with Claim 4 wherein receiving CS information comprises:
- using a template selected by a user from the plurality of templates stored in the centralized database to gather protocols for operating the at least one medical device;
 - displaying the template on the client system;

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system.

[c8] A method in accordance with Claim 1 wherein tracking CS information comprises exporting CS information selected by a user to at least one computer program.

[c9] A method in accordance with Claim 1 wherein tracking CS information further comprises:
 linking to a specific patient involved in a clinical study at least one of a patient medical history, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents and information relating to the treatment and/or diagnosis of the patient; and
 displaying on the client system at least one of the patient medical history, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of the patient.

[c10] A method in accordance with Claim 1 wherein providing CS information comprises:
 displaying on the client system at least one of a list of patients involved in a clinical study and a list of clinical studies conducted by the clinical research entity;
 receiving an inquiry from the client system regarding at least one of a patient included within the patient list and a clinical study included within the clinical study list.

[c11] A method in accordance with Claim 1 wherein providing CS information

comprises:

receiving an inquiry from the client system regarding at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity; and

displaying information on the client system regarding at least one of the patient name, the patient sex, the patient medical history, the patient weight, the patient height, the patient age, the patient ID number, the modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of the patient.

[c12] A method in accordance with Claim 1 wherein providing CS information comprises:

accessing the centralized database;
searching the database regarding the specific inquiry;
retrieving information from the database; and
transmitting the retrieved information to the client system for display by the client system.

[c13] A method in accordance with Claim 1 further comprising connecting the client system and the server system via a network that includes one of a wide area network, a local area network, an intranet and the Internet.

[c14] A method for managing clinical study (CS) information for a clinical research entity using a server system coupled to a centralized database and at least one client system, the at least one client system in communication with at least one medical device, the centralized database having a plurality of templates stored therein, said method comprising:

- using a template selected by a user from the plurality of templates stored in the centralized database to gather protocols for operating the at least one medical device;
- operating the at least one medical device based on the entered protocols;
- receiving at the server system CS information that relates to at least one patient involved in a clinical study, the CS information is entered through a user selected template displayed on the client system and is generated as part of the operation of the at least one medical device including at least one of x-rays and diagnostic images;
- storing CS information received at the server system in the centralized database;
- tracking CS information stored in the centralized database;
- updating the centralized database periodically with newly received CS information to maintain CS information;
- providing CS information in response to an inquiry; and
- transmitting from the server system to the at least one client system at least one report relating to CS information and findings for at least one of a clinical study and a patient involved in a clinical study.

[c15] A method in accordance with Claim 14 further comprising providing at least one medical device including at least one of a computed tomography device, a radiography device, a positron emission tomography device, and an ultrasound imaging device.

[c16] A method in accordance with Claim 14 wherein receiving CS information comprises:

- receiving at the server system at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical

application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity.

- [c17] A network based system for managing clinical study (CS) information, said system comprising:
- a client system comprising a browser;
 - a centralized database for storing information and a plurality of templates; and
 - a server system configured to be coupled to said client system and said database, said server system further configured to:
 - receive CS information relating to at least one patient involved in a clinical study, said CS information entered through a user selected template displayed on said client system;
 - store CS information in said centralized database;
 - track CS information;
 - update said centralized database periodically with newly received CS information to maintain CS information; and
 - provide CS information in response to an inquiry by a user.
- [c18] A system in accordance with Claim 17 wherein said server system is further configured to transmit to said client system at least one report summarizing CS information and findings for a clinical study.
- [c19] A system in accordance with Claim 17 wherein said server system is further configured to transmit to said client system at least one report summarizing CS information and findings for at least one patient involved in a clinical study.
- [c20] A system in accordance with Claim 17 further comprising at least one medical device in communication with said client system and said server system, said at least one medical device including at least one of a computed tomography device, a radiography device, a positron emission tomography device, and an

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[c21]

A system in accordance with Claim 20 wherein said server system further comprises a receiving component that:

- uses a template selected by a user from said plurality of templates stored in said centralized database to gather protocols for operating said at least one medical device;
- displays said selected template on said client system;
- operates said at least one medical device based on said entered protocols; and
- receives CS information generated as part of the operation of said at least one medical device including at least one of x-rays and diagnostic images for a patient involved in a clinical study.

[c22]

A system in accordance with Claim 17 wherein said server system further comprises a receiving component that:

- uses a template selected by a user from said plurality of templates stored in said centralized database to gather CS information;
- displays said selected template on said client system; and
- receives through said selected template at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents and information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity.

[c23]

A system in accordance with Claim 17 wherein said server system further comprises a tracking component that:

compiles a data report including at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical

application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information relating to utilized medical equipment, engineering information relating to utilized medical equipment, marketing information relating to utilized medical equipment, and any other information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity; and
transmits said data report to a predesignated party at said client system.

[c24] A system in accordance with Claim 17 wherein said server system further comprises a tracking component that exports CS information selected by a user to at least one computer program.

[c25] A system in accordance with Claim 17 wherein said server system further comprises a tracking component that:
links to a specific patient involved in a clinical study at least one of a patient medical history, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents and information relating to the treatment and/or diagnosis of said patient; and
displays on said client system at least one of said patient medical history, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of said patient.

[c26] A system in accordance with Claim 17 wherein said server system further comprises a providing component that:

displays on said client system at least one of a list of patients involved in a clinical study and a list of clinical studies conducted by the clinical research entity; and

receives an inquiry from said client system regarding at least one of a patient included within said patient list and a clinical study included within said clinical study list.

[c27]

A system in accordance with Claim 17 wherein said server system further comprises a providing component that:

receives an inquiry from said client system regarding at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity; and

displays information on said client system regarding at least one of said patient name, said patient sex, said patient medical history, said patient weight, said patient height, said patient age, said patient ID number, said modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of said patient.

[c28]

A system in accordance with Claim 17 wherein said server system further comprises a providing component that:

accesses said centralized database;

searches said database regarding a specific inquiry;
retrieves information from said database; and
transmits said retrieved information to said client system for display by said client system.

[c29] A system in accordance with Claim 17 wherein said server system, said client system, and said database are connected via a network that includes one of a wide area network, a local area network, an intranet and the Internet.

[c30] A network based system for managing clinical study (CS) information, said system comprising:
a client system comprising a browser;
at least one medical device in communication with said client system;
a centralized database for storing information and a plurality of templates; and
a server system configured to be coupled to said client system and said database, said server system further configured to:
use a template selected by a user from said plurality of templates stored in said centralized database to gather protocols for operating said at least one medical device;
operate said at least one medical device based on said entered protocols;
receive CS information relating to at least one patient involved in a clinical study, said CS information entered through a user selected template displayed on said client system and generated as part of the operation of said at least one medical device including at least one of x-rays and diagnostic images;
store CS information in said centralized database;
track CS information;
update said centralized database periodically with newly received CS information to maintain CS information;
provide CS information in response to an inquiry; and
transmit to said client system at least one report relating to CS information and findings for at least one of a clinical study and a patient involved in a clinical study.

[c31] A system in accordance with Claim 30 wherein said at least one medical device

comprises at least one of a computed tomography device, a radiography device, a positron emission tomography device, and an ultrasound imaging device.

[c32] A system in accordance with Claim 30 wherein said server system further comprises a receiving component that:
receives at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity.

[c33] A computer program embodied on a computer readable medium for managing clinical study (CS) information, said program comprising a code segment that:
receives CS information relating to at least one patient involved in a clinical study through a user selected template displayed on a client system;
maintains a database by adding, deleting and updating CS information;
tracks CS information;
provides CS information in response to an inquiry by a user; and
transmits to said client system at least one report summarizing CS information and findings relating to at least one of a clinical study and a patient involved in a clinical study.

[c34] A computer program in accordance with Claim 33 further comprising a code segment that enables at least one medical device to communicate with said client system wherein said at least one medical device includes at least one of a computed tomography device, a radiography device, a positron emission tomography device, and an ultrasound imaging device.

[c35] A computer program in accordance with Claim 34 further comprising a code segment that:

displays a template selected by a user on said client system;
uses said selected template to gather protocols for operating said at least one medical device;
operates said at least one medical device based on said entered protocols; and
receives CS information generated as part of the operation of said at least one medical device including at least one of x-rays and diagnostic images.

[c36] A computer program in accordance with Claim 33 further comprising a code segment that:
displays a template selected by a user on said client system;
uses said selected template to gather CS information; and
receives through said selected template at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents and information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity.

[c37] A computer program in accordance with Claim 33 further comprising a code segment that:
compiles a data report including at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information relating to utilized medical equipment, engineering information relating to utilized medical equipment, marketing information relating to utilized medical equipment, and any other information relating to the treatment and/or diagnosis of a patient involved in a clinical study conducted by the clinical research entity; and

transmits said data report to a predesignated party at said client system.

[c38] A computer program in accordance with Claim 33 further comprising a code segment that:

links to a specific patient involved in a clinical study at least one of a patient medical history, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents and information relating to the treatment and/or diagnosis of said patient; and

displays on said client system at least one of said patient medical history, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays; manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of said patient.

[c39] A computer program in accordance with Claim 33 further comprising a code segment that:

displays on said client system at least one of a list of patients involved in a clinical study and a list of clinical studies conducted by the clinical research entity; and

receives an inquiry from said the client system regarding at least one of a patient included within said patient list and a clinical study included within said clinical study list.

[c40] A computer program in accordance with Claim 33 further comprising a code segment that:

receives an inquiry from said client system regarding at least one of a patient name, a patient sex, a patient medical history, a patient weight, a patient

height, a patient age, a patient ID number, a modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of the patient involved in a clinical study conducted by the clinical research entity; and

displays information on said the client system regarding at least one of said patient name, said patient sex, said patient medical history, said patient weight, said patient height, said patient age, said patient ID number, said modality of treatment and/or diagnosis, utilized medical application information, utilized medical equipment information, treatment and/or diagnosis results, modeled images, x-rays, manufacturing information and documents relating to utilized medical equipment, engineering information and documents relating to utilized medical equipment, marketing information and documents relating to utilized medical equipment, and any other documents or information relating to the treatment and/or diagnosis of said patient.